Claims

1.   A method for screening, diagnosis or prognosis of Alzheimer's disease in a
subject, for determining the stage or severity of Alzheimer's disease in a subject, for
5   identifying a subject at risk of developing Alzheimer's disease, or for monitoring the
effect of therapy administered to a subject having Alzheimer's disease, said method
comprising:
        (a)   analysing a test sample of brain tissue from the subject by two
dimensional electrophoresis to generate a two-dimensional array of features, said array
10   comprising at least one chosen feature whose relative abundance correlates with the
presence, absence, stage or severity of Alzheimer's disease or predicts the onset or
course of Alzheimer's disease; and
        (b)   comparing the abundance of each chosen feature in the test sample with
the abundance of that chosen feature in brain tissue from one or more persons free
15   from Alzheimer's disease, or with a previously determined reference range for that
feature in subjects free from Alzheimer's disease, or with the abundance at least one
Expression Reference Feature (ERF) in the test sample.

2.   The method of claim 1, wherein said method is for screening or diagnosis of
20   Alzheimer's disease and the relative abundance of at least one chosen feature
correlates with the presence or absence of Alzheimer's disease.

3.   The method of claim 1, wherein said method is for monitoring the effect of
therapy administered to a subject having Alzheimer's disease and the relative
25   abundance of at least one chosen feature correlates with the severity of Alzheimer's
disease.

4.   The method of claim 1, 2 or 3, wherein step (b) comprises comparing the
abundance of each chosen feature in the sample with the abundance of that chosen

feature in brain tissue from one or more persons free from Alzheimer's disease or with a previously determined reference range for that chosen feature in subjects free from Alzheimer's disease.

5.   The method of any claim 1, 2, 3 or 4, wherein step (b) comprises quantitatively detecting one or more of the following Alzheimer's Disease-Associated Features (ADFs): ADF-1, ADF-3, ADF-5, ADF-6, ADF-8, ADF-9, ADF-10, ADF-11, ADF-12, ADF-13, ADF-15, ADF-16, ADF-22, ADF-23, ADF-24, ADF-25, ADF-26, ADF-27, ADF-29, ADF-31, ADF-33, ADF-35, ADF-37, ADF-39, ADF-42, ADF-54, ADF-56, ADF-61, ADF-62, ADF-66, ADF-67, ADF-68, ADF-70, ADF-72, ADF-77, ADF-78, ADF-79, ADF-81, ADF-82, ADF-85, ADF-87, ADF-88, ADF-90, ADF-91, ADF-92, ADF-94, ADF-95, ADF-97, ADF-98, ADF-101, ADF-102, ADF-103, ADF-105, ADF-107, ADF-108, ADF-109, ADF-111, ADF-112, ADF-113, ADF-115, ADF-117, ADF-119, ADF-120, ADF-121, ADF-124, ADF-125, ADF-126, ADF-127, ADF-128, ADF-129, ADF-130, ADF-131, ADF-132, ADF-133, ADF-138, ADF-139, ADF-140, ADF-141, ADF-142, ADF-143, ADF-144, ADF-146, ADF-148, ADF-149, ADF-150, ADF-151, ADF-152, ADF-153, ADF-154, ADF-155, ADF-156, ADF-157, ADF-159, ADF-160, ADF-162, ADF-163, ADF-165, ADF-172, ADF-173, ADF-175, ADF-176, ADF-182, ADF-183, ADF-188, ADF-189, ADF-191, ADF-193, ADF-194, ADF-196, ADF-202, ADF-204, ADF-208, ADF-209, ADF-216, ADF-217, ADF-220, ADF-223, ADF-228, ADF-229, ADF-230, ADF-232, ADF-236, ADF-237, ADF-240, ADF-243, ADF-245, ADF-250, ADF-251, ADF-252, ADF-253, ADF-254, ADF-255, ADF-256, ADF-257, ADF-258, ADF-259, ADF-260, ADF-261, ADF-262, ADF-263, ADF-264, ADF-265, ADF-266, ADF-267, ADF-268, ADF-269, ADF-270, ADF-271, ADF-272, ADF-273, ADF-274, ADF-275, ADF-276, ADF-277, ADF-278, ADF-279, ADF-280, ADF-281, ADF-282, ADF-283, ADF-284, ADF-285, ADF-286, ADF-287, ADF-288, ADF-289, ADF-290, ADF-291, ADF-292, ADF-293, ADF-294, ADF-295, ADF-296, ADF-297, ADF-298, ADF-299, ADF-300, ADF-301, ADF-302, ADF-303, ADF-304, ADF-305, ADF-306, ADF-307, ADF-308, ADF-309, ADF-311, ADF-312, ADF-313,

ADF-314, ADF-315, ADF-316, ADF-317, ADF-318, ADF-319, ADF-320, ADF-321,

ADF-322, ADF-323, ADF-324, ADF-325, ADF-326, ADF-327, ADF-328, ADF-329,

ADF-330, ADF-331, ADF-332, ADF-333, ADF-334, ADF-335, ADF-336, ADF-337,

ADF-338, ADF-339, ADF-340, ADF-341, ADF-342, ADF-343, ADF-344, ADF-345,

5   ADF-346, ADF-347, ADF-348, ADF-349, ADF-350, ADF-351, ADF-352, ADF-353,

ADF-354, ADF-355, ADF-356, ADF-357, ADF-358, ADF-359, ADF-360, ADF-361,

ADF-362, ADF-363, ADF-364, ADF-365, ADF-366, ADF-367, ADF-368, ADF-369,

ADF-370, ADF-371, ADF-372, ADF-373, ADF-374, ADF-375, ADF-376, ADF-377,

ADF-378, ADF-379, ADF-380, ADF-381, ADF-382, ADF-383, ADF-384, ADF-386,

10   ADF-387, ADF-388, ADF-389, ADF-390, ADF-391, ADF-392, ADF-393, ADF-394,

ADF-395, ADF-396, ADF-397, ADF-398, ADF-399, ADF-400, ADF-401, ADF-402,

ADF-403, ADF-404, ADF-405, ADF-406, ADF-407, ADF-408, ADF-409, ADF-410,

ADF-411, ADF-412, ADF-413, ADF-414, ADF-415, ADF-416, ADF-417, ADF-418,

ADF-419, ADF-420, ADF-421, ADF-422, ADF-423, ADF-424, ADF-425, ADF-426,

15   ADF-427, ADF-428, ADF-429, ADF-430, ADF-431, ADF-432, ADF-433, ADF-434,

ADF-435, ADF-436, ADF-437, ADF-438, ADF-439, ADF-440, ADF-441, ADF-442,

ADF-443, ADF-444, ADF-445, ADF-446, ADF-447, ADF-448, ADF-449, ADF-450,

ADF-451, ADF-452, ADF-453, ADF-454, ADF-455, ADF-456, ADF-457, ADF-458,

ADF-459, ADF-460, ADF-461, ADF-462, ADF-463, ADF-464, ADF-465, ADF-466,

20   ADF-467, ADF-468, ADF-469, ADF-470, ADF-471, ADF-472, ADF-473, ADF-474,

ADF-475, ADF-476, ADF-477, ADF-478, ADF-479, ADF-480, ADF-481, ADF-482,

ADF-483, ADF-484, ADF-485, ADF-486, ADF-487, ADF-488, ADF-489, ADF-490,

ADF-491, ADF-492, ADF-493, ADF-494, ADF-495, ADF-496, ADF-497, ADF-498,

ADF-499, ADF-500, ADF-501, ADF-502, ADF-503, ADF-504, ADF-505, ADF-506,

25   ADF-507, ADF-508, ADF-509, ADF-510, ADF-511, ADF-512, ADF-513, ADF-514,

ADF-515, ADF-516, ADF-517, ADF-518, ADF-519, ADF-520, ADF-521, ADF-522,

ADF-523, ADF-524, ADF-525, ADF-526, ADF-527, ADF-528, ADF-529, ADF-530,

ADF-531, ADF-532, ADF-533, ADF-534, ADF-535, ADF-536, ADF-537, ADF-538,

ADF-539, ADF-540, ADF-541, ADF-542, ADF-543, ADF-544, ADF-545, ADF-546,

ADF-547, ADF-548, ADF-549, optionally in combination with ADF-41.

6.   The method of claim 1-4 or 5, wherein step (a) comprises isoelectric focussing followed by sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE).

5

7.   A method for screening, diagnosis or prognosis of Alzheimer's disease in a subject, for determining the stage or severity of Alzheimer's disease in a subject, for identifying a subject at risk of developing Alzheimer's disease, or for monitoring the effect of therapy administered to a subject having Alzheimer's disease, said method

10   comprising:

        quantitatively detecting, in a sample of brain tissue from the subject, at least one of the following Alzheimer's Disease-Associated Protein Isoforms (ADPIs): ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-

15   23, ADPI-24, ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-

20   101, ADPI-102.1, ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-

25   143.2, ADPI-144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1, ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-

244

183, ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2,

ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209,

ADPI-216, ADPI-217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1,

ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2,

5   ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1,

ADPI-252.2, ADPI-253, ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2,

ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263,

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10   ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-

281, ADPI-282, ADPI-283, ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288,

ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295,

ADPI-296, ADPI-297, ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302,

ADPI-303, ADPI-304, ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308,

15   ADPI-309, ADPI-311, ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1,

ADPI-316.2, ADPI-317, ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321,

ADPI-322, ADPI-323, ADPI-324, ADPI-325, ADPI-326, ADPI-327, ADPI-328,

ADPI-329, ADPI-330, ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334,

ADPI-335, ADPI-336, ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341,

20   ADPI-342, ADPI-343, ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348,

ADPI-349, ADPI-350, ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355,

ADPI-356, ADPI-357, ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362,

ADPI-363, ADPI-364, ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-

367.2, ADPI-368.1, ADPI-368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-371,

25   ADPI-372, ADPI-373, ADPI-374, ADPI-375, ADPI-376, ADPI-377, ADPI-378,

ADPI-379, ADPI-380, ADPI-381, ADPI-382, ADPI-383, ADPI-384, ADPI-386,

ADPI-387, ADPI-388, ADPI-389, ADPI-390, ADPI-391, ADPI-392, ADPI-393,

ADPI-394, ADPI-395, ADPI-396, ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2,

ADPI-400, ADPI-401, ADPI-402, ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405,

ADPI-406, ADPI-407, ADPI-408, ADPI-409, ADPI-410, ADPI-411, ADPI-412.1,

ADPI-412.2, ADPI-413, ADPI-414, ADPI-415, ADPI-416, ADPI-417, ADPI-418,

ADPI-419, ADPI-420, ADPI-421, ADPI-422, ADPI-423, ADPI-424, ADPI-425,

ADPI-426.1, ADPI-426.2, ADPI-427, ADPI-428, ADPI-429, ADPI-430, ADPI-431,

5   ADPI-432, ADPI-433, ADPI-434, ADPI-435, ADPI-435, ADPI-436, ADPI-437,

ADPI-438, ADPI-439, ADPI-440.1, ADPI-440.2, ADPI-441, ADPI-442, ADPI-443,

ADPI-444, ADPI-445, ADPI-446, ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449,

ADPI-450.1, ADPI-450.2, ADPI-451, ADPI-452, ADPI-453, ADPI-454, ADPI-455,

ADPI-456, ADPI-457, ADPI-458, ADPI-459, ADPI-460, ADPI-461, ADPI-462,

10   ADPI-463, ADPI-464, ADPI-465, ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468,

ADPI-469.1, ADPI-469.2, ADPI-470, ADPI-471, ADPI-472, ADPI-473, ADPI-474,

ADPI-475, ADPI-476, ADPI-477, ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480,

ADPI-481, ADPI-482, ADPI-483, ADPI-484, ADPI-485, ADPI-486, ADPI-487,

ADPI-488, ADPI-489, ADPI-490, ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2,

15   ADPI-494, ADPI-495, ADPI-496, ADPI-497, ADPI-498, ADPI-499, ADPI-500,

ADPI-501, ADPI-502, ADPI-503, ADPI-504, ADPI-505, ADPI-506, ADPI-507,

ADPI-508, ADPI-509, ADPI-510, ADPI-511, ADPI-512, ADPI-513, ADPI-514,

ADPI-515, ADPI-516, ADPI-517, ADPI-518, ADPI-519, ADPI-520, ADPI-521,

ADPI-522, ADPI-523, ADPI-524, ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527,

20   ADPI-528, ADPI-529, ADPI-530.1, ADPI-530.2, ADPI-531, ADPI-532, ADPI-533,

ADPI-534, ADPI-535, ADPI-536, ADPI-537, ADPI-538, ADPI-539, ADPI-540,

ADPI-541, ADPI-542, ADPI-543, ADPI-544, ADPI-545, ADPI-546, ADPI-547.1,

ADPI-547.2, ADPI-547.3, ADPI-548.1, ADPI-548.2, ADPI-549, optionally in

combination with ADPI-41; and

25   comparing the level or amount of said isoform or isoforms detected in step (a)

with a control.

8.   The method of claim 7, wherein the step of quantitatively detecting comprises

testing at least one aliquot of the sample, said step of testing comprising:

(a) contacting the aliquot with an antibody that is immunospecific for a preselected ADPI;

(b) quantitatively measuring any binding that has occurred between the antibody and at least one species in the aliquot; and

5   (c) comparing the results of step (b) to a control.

9.   The method of claim 8, wherein the step of quantitatively detecting comprises testing a plurality of aliquots with a plurality of antibodies for quantitative detection of a plurality of preselected ADPIs.

10

10.   The method of claim 8 or claim 9, wherein the or each antibody is/are monoclonal.

11.   The method of claim 10, wherein the or each antiboyd is/are chimeric.

15

12.   A preparation comprising at least one of the following isolated Alzheimer's Disease-Associated Protein Isoforms (ADPIs) said ADPI selected from ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23,
20   ADPI-24, ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-
25   101, ADPI-102.1, ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-

143.2, ADPI-144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150,

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ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172,

5   ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-

183, ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2,

ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209,

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ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2,

10   ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1,

ADPI-252.2, ADPI-253, ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2,

ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263,

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15   ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-

281, ADPI-282, ADPI-283, ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288,

ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295,

ADPI-296, ADPI-297, ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302,

ADPI-303, ADPI-304, ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308,

20   ADPI-309, ADPI-311, ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1,

ADPI-316.2, ADPI-317, ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321,

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ADPI-329, ADPI-330, ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334,

ADPI-335, ADPI-336, ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341,

25   ADPI-342, ADPI-343, ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348,

ADPI-349, ADPI-350, ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355,

ADPI-356, ADPI-357, ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362,

ADPI-363, ADPI-364, ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-

367.2, ADPI-368.1, ADPI-368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-371,

ADPI-372, ADPI-373, ADPI-374, ADPI-375, ADPI-376, ADPI-377, ADPI-378,

ADPI-379, ADPI-380, ADPI-381, ADPI-382, ADPI-383, ADPI-384, ADPI-386,

ADPI-387, ADPI-388, ADPI-389, ADPI-390, ADPI-391, ADPI-392, ADPI-393,

ADPI-394, ADPI-395, ADPI-396, ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2,

5   ADPI-400, ADPI-401, ADPI-402, ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405,

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ADPI-412.2, ADPI-413, ADPI-414, ADPI-415, ADPI-416, ADPI-417, ADPI-418,

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ADPI-426.1, ADPI-426.2, ADPI-427, ADPI-428, ADPI-429, ADPI-430, ADPI-431,

10   ADPI-432, ADPI-433, ADPI-434, ADPI-435, ADPI-435, ADPI-436, ADPI-437,

ADPI-438, ADPI-439, ADPI-440.1, ADPI-440.2, ADPI-441, ADPI-442, ADPI-443,

ADPI-444, ADPI-445, ADPI-446, ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449,

ADPI-450.1, ADPI-450.2, ADPI-451, ADPI-452, ADPI-453, ADPI-454, ADPI-455,

ADPI-456, ADPI-457, ADPI-458, ADPI-459, ADPI-460, ADPI-461, ADPI-462,

15   ADPI-463, ADPI-464, ADPI-465, ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468,

ADPI-469.1, ADPI-469.2, ADPI-470, ADPI-471, ADPI-472, ADPI-473, ADPI-474,

ADPI-475, ADPI-476, ADPI-477, ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480,

ADPI-481, ADPI-482, ADPI-483, ADPI-484, ADPI-485, ADPI-486, ADPI-487,

ADPI-488, ADPI-489, ADPI-490, ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2,

20   ADPI-494, ADPI-495, ADPI-496, ADPI-497, ADPI-498, ADPI-499, ADPI-500,

ADPI-501, ADPI-502, ADPI-503, ADPI-504, ADPI-505, ADPI-506, ADPI-507,

ADPI-508, ADPI-509, ADPI-510, ADPI-511, ADPI-512, ADPI-513, ADPI-514,

ADPI-515, ADPI-516, ADPI-517, ADPI-518, ADPI-519, ADPI-520, ADPI-521,

ADPI-522, ADPI-523, ADPI-524, ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527,

25   ADPI-528, ADPI-529, ADPI-530.1, ADPI-530.2, ADPI-531, ADPI-532, ADPI-533,

ADPI-534, ADPI-535, ADPI-536, ADPI-537, ADPI-538, ADPI-539, ADPI-540,

ADPI-541, ADPI-542, ADPI-543, ADPI-544, ADPI-545, ADPI-546, ADPI-547.1,

ADPI-547.2, ADPI-547.3, ADPI-548.1, ADPI-548.2, ADPI-549, optionally in

combination with ADF-41.

13.   The preparation of claim 15, wherein the or each Alzheimer's Disease-Associated Protein Isoform (ADPI) is/are in recombinant or isolated form.

5   14.   A kit comprising the preparation of claim 12 or claim 13, other reagents, and directions for use.

15.   A kit comprising a plurality of distinct preparations as claimed in claim 12 or claim 13.

10

16.   An antibody capable of immunospecific binding to one of the following Alzheimer's Disease-Associated Protein Isoforms (ADPIs): ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24, ADPI-25.3, 15   ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-20   103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-144, ADPI-25   146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1, ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183, ADPI-188.1,

ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-
196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-216, ADPI-
217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-230.2, ADPI-
232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240,

5   ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253,
ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1,
ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-264, ADPI-265,
ADPI-266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271,
ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1,

10   ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283,
ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290,
ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296, ADPI-297,
ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302, ADPI-303, ADPI-304,
ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311,

15   ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2, ADPI-317,
ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323,
ADPI-324, ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329, ADPI-330,
ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334, ADPI-335, ADPI-336,
ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341, ADPI-342, ADPI-343,

20   ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348, ADPI-349, ADPI-350,
ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355, ADPI-356, ADPI-357,
ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362, ADPI-363, ADPI-364,
ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-367.2, ADPI-368.1, ADPI-
368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-371, ADPI-372, ADPI-373, ADPI-

25   374, ADPI-375, ADPI-376, ADPI-377, ADPI-378, ADPI-379, ADPI-380, ADPI-381,
ADPI-382, ADPI-383, ADPI-384, ADPI-386, ADPI-387, ADPI-388, ADPI-389,
ADPI-390, ADPI-391, ADPI-392, ADPI-393, ADPI-394, ADPI-395, ADPI-396,
ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2, ADPI-400, ADPI-401, ADPI-402,
ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405, ADPI-406, ADPI-407, ADPI-408,

ADPI-409, ADPI-410, ADPI-411, ADPI-412.1, ADPI-412.2, ADPI-413, ADPI-414,

ADPI-415, ADPI-416, ADPI-417, ADPI-418, ADPI-419, ADPI-420, ADPI-421,

ADPI-422, ADPI-423, ADPI-424, ADPI-425, ADPI-426.1, ADPI-426.2, ADPI-427,

ADPI-428, ADPI-429, ADPI-430, ADPI-431, ADPI-432, ADPI-433, ADPI-434,

5   ADPI-435, ADPI-435, ADPI-436, ADPI-437, ADPI-438, ADPI-439, ADPI-440.1,

ADPI-440.2, ADPI-441, ADPI-442, ADPI-443, ADPI-444, ADPI-445, ADPI-446,

ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449, ADPI-450.1, ADPI-450.2, ADPI-

451, ADPI-452, ADPI-453, ADPI-454, ADPI-455, ADPI-456, ADPI-457, ADPI-458,

ADPI-459, ADPI-460, ADPI-461, ADPI-462, ADPI-463, ADPI-464, ADPI-465,

10   ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468, ADPI-469.1, ADPI-469.2, ADPI-

470, ADPI-471, ADPI-472, ADPI-473, ADPI-474, ADPI-475, ADPI-476, ADPI-477,

ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480, ADPI-481, ADPI-482, ADPI-483,

ADPI-484, ADPI-485, ADPI-486, ADPI-487, ADPI-488, ADPI-489, ADPI-490,

ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2, ADPI-494, ADPI-495, ADPI-496,

15   ADPI-497, ADPI-498, ADPI-499, ADPI-500, ADPI-501, ADPI-502, ADPI-503,

ADPI-504, ADPI-505, ADPI-506, ADPI-507, ADPI-508, ADPI-509, ADPI-510,

ADPI-511, ADPI-512, ADPI-513, ADPI-514, ADPI-515, ADPI-516, ADPI-517,

ADPI-518, ADPI-519, ADPI-520, ADPI-521, ADPI-522, ADPI-523, ADPI-524,

ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528, ADPI-529, ADPI-530.1,

20   ADPI-530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534, ADPI-535, ADPI-536,

ADPI-537, ADPI-538, ADPI-539, ADPI-540, ADPI-541, ADPI-542, ADPI-543,

ADPI-544, ADPI-545, ADPI-546, ADPI-547.1, ADPI-547.2, ADPI-547.3, ADPI-

548.1, ADPI-548.2, ADPI-549, optionally in combination with ADPI-41.

25   17.   The antibody of claim 16, which is a monoclonal antibody.

18.   The antibody of claim 16 or claim 17, which is a chimeric antibody.

19.   The antibody of claim 16, 17 or 18, which binds to the ADPI with greater

affinity than to another isoform or variant of the ADPI.

20.   A kit comprising an antibody as claimed in any one of claims 16 to 19, other reagents, and directions for use.

21.   A kit comprising a plurality of distinct antibodies as claimed in any one of claims 16 to 19.

22.   A pharmaceutical composition comprising a therapeutically effective amount of an antibody as claimed in any one of claims 16 to 19 or a fragment or derivative of such an antibody containing the binding domain of the antibody, and a pharmaceutically acceptable carrier.

23.   A method of treating or preventing Alzheimer's disease comprising administering to a subject in need of such treatment or prevention a therapeutically effective amount of an antibody as claimed in any one of claims 16 to 19.

24.   A method of treating or preventing Alzheimer's disease comprising administering to a subject in need of such treatment or prevention a therapeutically effective amount of one or more of the following Alzheimer's Disease-Associated Protein Isoforms (ADPIs) and/or a nucleic acid encoding such ADPIs: ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24, ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1,

ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-

5   144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1, ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183,

10 ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-216, ADPI-217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-

15 252.2, ADPI-253, ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-264, ADPI-265, ADPI-266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271, ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-

20 282, ADPI-283, ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296, ADPI-297, ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302, ADPI-303, ADPI-304, ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311, ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2,

25 ADPI-317, ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323, ADPI-324, ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329, ADPI-330, ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334, ADPI-335, ADPI-336, ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341, ADPI-342, ADPI-343, ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348, ADPI-349,

ADPI-350, ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355, ADPI-356,

ADPI-357, ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362, ADPI-363,

ADPI-364, ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-367.2, ADPI-

368.1, ADPI-368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-371, ADPI-372,

5 ADPI-373, ADPI-374, ADPI-375, ADPI-376, ADPI-377, ADPI-378, ADPI-379,

ADPI-380, ADPI-381, ADPI-382, ADPI-383, ADPI-384, ADPI-386, ADPI-387,

ADPI-388, ADPI-389, ADPI-390, ADPI-391, ADPI-392, ADPI-393, ADPI-394,

ADPI-395, ADPI-396, ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2, ADPI-400,

ADPI-401, ADPI-402, ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405, ADPI-406,

10 ADPI-407, ADPI-408, ADPI-409, ADPI-410, ADPI-411, ADPI-412.1, ADPI-412.2,

ADPI-413, ADPI-414, ADPI-415, ADPI-416, ADPI-417, ADPI-418, ADPI-419,

ADPI-420, ADPI-421, ADPI-422, ADPI-423, ADPI-424, ADPI-425, ADPI-426.1,

ADPI-426.2, ADPI-427, ADPI-428, ADPI-429, ADPI-430, ADPI-431, ADPI-432,

ADPI-433, ADPI-434, ADPI-435, ADPI-435, ADPI-436, ADPI-437, ADPI-438,

15 ADPI-439, ADPI-440.1, ADPI-440.2, ADPI-441, ADPI-442, ADPI-443, ADPI-444,

ADPI-445, ADPI-446, ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449, ADPI-450.1,

ADPI-450.2, ADPI-451, ADPI-452, ADPI-453, ADPI-454, ADPI-455, ADPI-456,

ADPI-457, ADPI-458, ADPI-459, ADPI-460, ADPI-461, ADPI-462, ADPI-463,

ADPI-464, ADPI-465, ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468, ADPI-469.1,

20 ADPI-469.2, ADPI-470, ADPI-471, ADPI-472, ADPI-473, ADPI-474, ADPI-475,

ADPI-476, ADPI-477, ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480, ADPI-481,

ADPI-482, ADPI-483, ADPI-484, ADPI-485, ADPI-486, ADPI-487, ADPI-488,

ADPI-489, ADPI-490, ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2, ADPI-494,

ADPI-495, ADPI-496, ADPI-497, ADPI-498, ADPI-499, ADPI-500, ADPI-501,

25 ADPI-502, ADPI-503, ADPI-504, ADPI-505, ADPI-506, ADPI-507, ADPI-508,

ADPI-509, ADPI-510, ADPI-511, ADPI-512, ADPI-513, ADPI-514, ADPI-515,

ADPI-516, ADPI-517, ADPI-518, ADPI-519, ADPI-520, ADPI-521, ADPI-522,

ADPI-523, ADPI-524, ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528,

ADPI-529, ADPI-530.1, ADPI-530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534,

ADPI-535, ADPI-536, ADPI-537, ADPI-538, ADPI-539, ADPI-540, ADPI-541,

ADPI-542, ADPI-543, ADPI-544, ADPI-545, ADPI-546, ADPI-547.1, ADPI-547.2,

ADPI-547.3, ADPI-548.1, ADPI-548.2, ADPI-549, optionally in combination with

ADPI-41.

5

25.   A method of treating or preventing Alzheimer's disease comprising

administering to a subject in need of such treatment or prevention a therapeutically

effective amount of a nucleic acid that inhibits the function of one or more of the

following Alzheimer's Disease-Associated Protein Isoforms (ADPIs): ADPI-1, ADPI-

10   3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11,

ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24,

ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-

35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66,

ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79,

15   ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-

91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1,

ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1,

ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121,

ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128,

20   ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139,

ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-

144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2,

ADPI-151.1, ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-

155, ADPI-156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160,

25   ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-

173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183,

ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-

196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-

216, ADPI-217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-

230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253, ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-

5   264, ADPI-265, ADPI-266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271, ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283, ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296,

10 ADPI-297, ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302, ADPI-303, ADPI-304, ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311, ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2, ADPI-317, ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323, ADPI-324, ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329,

15 ADPI-330, ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334, ADPI-335, ADPI-336, ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341, ADPI-342, ADPI-343, ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348, ADPI-349, ADPI-350, ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355, ADPI-356, ADPI-357, ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362, ADPI-363,

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25 ADPI-395, ADPI-396, ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2, ADPI-400, ADPI-401, ADPI-402, ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405, ADPI-406, ADPI-407, ADPI-408, ADPI-409, ADPI-410, ADPI-411, ADPI-412.1, ADPI-412.2, ADPI-413, ADPI-414, ADPI-415, ADPI-416, ADPI-417, ADPI-418, ADPI-419, ADPI-420, ADPI-421, ADPI-422, ADPI-423, ADPI-424, ADPI-425, ADPI-426.1,

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ADPI-426.2, ADPI-427, ADPI-428, ADPI-429, ADPI-430, ADPI-431, ADPI-432,

ADPI-433, ADPI-434, ADPI-435, ADPI-435, ADPI-436, ADPI-437, ADPI-438,

ADPI-439, ADPI-440.1, ADPI-440.2, ADPI-441, ADPI-442, ADPI-443, ADPI-444,

ADPI-445, ADPI-446, ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449, ADPI-450.1,

5   ADPI-450.2, ADPI-451, ADPI-452, ADPI-453, ADPI-454, ADPI-455, ADPI-456,

ADPI-457, ADPI-458, ADPI-459, ADPI-460, ADPI-461, ADPI-462, ADPI-463,

ADPI-464, ADPI-465, ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468, ADPI-469.1,

ADPI-469.2, ADPI-470, ADPI-471, ADPI-472, ADPI-473, ADPI-474, ADPI-475,

ADPI-476, ADPI-477, ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480, ADPI-481,

10   ADPI-482, ADPI-483, ADPI-484, ADPI-485, ADPI-486, ADPI-487, ADPI-488,

ADPI-489, ADPI-490, ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2, ADPI-494,

ADPI-495, ADPI-496, ADPI-497, ADPI-498, ADPI-499, ADPI-500, ADPI-501,

ADPI-502, ADPI-503, ADPI-504, ADPI-505, ADPI-506, ADPI-507, ADPI-508,

ADPI-509, ADPI-510, ADPI-511, ADPI-512, ADPI-513, ADPI-514, ADPI-515,

15   ADPI-516, ADPI-517, ADPI-518, ADPI-519, ADPI-520, ADPI-521, ADPI-522,

ADPI-523, ADPI-524, ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528,

ADPI-529, ADPI-530.1, ADPI-530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534,

ADPI-535, ADPI-536, ADPI-537, ADPI-538, ADPI-539, ADPI-540, ADPI-541,

ADPI-542, ADPI-543, ADPI-544, ADPI-545, ADPI-546, ADPI-547.1, ADPI-547.2,

20   ADPI-547.3, ADPI-548.1, ADPI-548.2, ADPI-549, optionally in combination with a

therapeutically effective amount of a nucleic acid that inhibits the function of ADPI-

41.

26.   The method of claim 25, wherein the nucleic acid is a ADPI antisense nucleic

25   acid or ribozyme.

27.   A method of screening for agents that interact with one or more of the

Alzheimer's Disease-Associated Protein Isoforms (ADPIs) as defined in claim 25, a

fragment of the or each ADPI (ADPI fragment), a polypeptide related to the or each

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ADPI (ADPI-related polypeptide), or a ADPI fusion protein, said method comprising:

(a) contacting a ADPI, a biologically active portion of a ADPI, a ADPI-related polypeptide, or a ADPI fusion protein with a candidate agent; and

(b) determining whether or not the candidate agent interacts with the ADPI, the ADPI fragment, the ADPI-related polypeptide, or the ADPI fusion protein.

28. The method of claim 27, wherein the ADPI, the ADPI fragment, the ADPI-related polypeptide, or the ADPI fusion protein is expressed by cells.

29. The method of claim 28, wherein the cells express a recombinant ADPI, a recombinant ADPI fragment, a recombinant ADPI-related polypeptide, or a ADPI fusion protein.

30. A method of screening for agents that modulate the expression or activity of one or more of the Alzheimer's Disease-Associated Protein Isoforms (ADPIs) as defined in claim 25, a fragment of the or each ADPI (ADPI fragment), a polypeptide related to the or each ADPI (ADPI-related polypeptide), or a ADPI fusion protein, said method comprising:

(a) contacting a first population of cells expressing a ADPI, a ADPI fragment, a ADPI-related polypeptide, or a ADPI fusion protein with a candidate agent;

(b) contacting a second population of cells expressing said ADPI, said ADPI fragment, said ADPI-related polypeptide, or said ADPI fusion protein, with a control agent; and

(c) comparing the level of said ADPI, said ADPI fragment, said ADPI-related polypeptide, said ADPI fusion protein, or mRNA encoding said ADPI, said ADPI fragment, said ADPI-related polypeptide, or said ADPI fusion protein, in the first and second populations of cells, or comparing the level of induction of a cellular second messenger in the first and second populations of cells.

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31.   The method as claimed in claim 30, wherein the level of said ADPI, said ADPI fragment , said ADPI-related polypeptide, said ADPI fusion protein, or mRNA encoding said ADPI, said ADPI fragment, said ADPI-related polypeptide, said ADPI fusion protein, or said cellular second messenger is greater or less in the first population of cells than in the second population of cells.

32.   A method of screening for or identifying agents that modulate the expression or activity of one or more of the Alzheimer's Disease-Associated Protein Isoforms (ADPIs) as defined in claim 25, a fragment of the or each ADPI (ADPI fragment), a polypeptide related to the or each ADPI (ADPI-related polypeptide), or a ADPI fusion protein, said method comprising:

(a)   administering a candidate agent to a first mammal or group of mammals;

(b)   administering a control agent to a second mammal or group of mammals; and

(c)   comparing the level of expression of the ADPI, the ADPI fragment, the ADPI-related polypeptide or the ADPI fusion protein or of mRNA encoding the ADPI, the ADPI fragment, the ADPI-related polypeptide or the ADPI fusion protein in the first and second groups, or comparing the level of induction of a cellular second messenger in the first and second groups.

33.   The method as claimed in claim 32, wherein the mammals are animal models for Alzheimer's disease.

34.   The method as claimed in claim 32 or claim 33, wherein the level of expression of said ADPI, said ADPI fragment, said ADPI-related polypeptide or said ADPI fusion protein, mRNA encoding said ADPI, said ADPI fragment, said ADPI-related polypeptide or said ADPI fusion protein or of said cellular second messenger is

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greater or less in the first group than in the second group.

35. The method as claimed in claim 33 or claim 34, wherein the levels of said ADPI, said ADPI fragment, said ADPI-related polypeptide or said ADPI fusion
5   protein, mRNA encoding said ADPI, said ADPI fragment, said ADPI-related polypeptide or said ADPI fusion protein, or of said cellular second messenger in the first and second groups are further compared to the level of said ADPI, said ADPI fragment, said ADPI-related polypeptide or said ADPI fusion protein, or said mRNA encoding said ADPI, said ADPI fragment, said ADPI-related polypeptide or said ADPI
10   fusion protein in normal control mammals.

36. The method as claimed in claim 33, 34 or 35, wherein administration of said candidate agent modulates the level of said ADPI, said ADPI fragment, said ADPI-related polypeptide or said ADPI fusion protein, or said mRNA encoding said ADPI,
15   said ADPI fragment, said ADPI-related polypeptide or said ADPI fusion protein, or said cellular second messenger in the first group towards the levels of said ADPI, said ADPI fragment, said ADPI-related polypeptide or said ADPI fusion protein, or said mRNA or said cellular second messenger in the second group.

20   37. The method as claimed in any of one of claims 32 to 36, wherein said mammals are human subjects having Alzheimer's disease.

38. A method of screening for or identifying agents that interact with one or more of the Alzheimer's Disease-Associated Protein Isoforms (ADPIs) as defined in claim
25   25, a fragment of the or each ADPI (ADPI fragment), a polypeptide related to the or each ADPI (ADPI-related polypeptide), or a ADPI fusion protein, said method comprising:

(a) contacting a candidate agent with the ADPI, the ADPI fragment, the ADPI-related polypeptide, or the ADPI fusion protein, and

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(b)   quantitatively detecting binding, if any, between the agent and the

ADPI, the ADPI fragment, the ADPI-related polypeptide, or the ADPI fusion protein.

39.   A method of screening for or identifying agents that modulate the activity of

5   one or more of the Alzheimer's Disease-Associated Protein Isoforms (ADPIs) as

defined in claim 25, a fragment of the or each ADPI (ADPI fragment), a polypeptide

related to the or each ADPI (ADPI-related polypeptide), or a ADPI fusion protein, said

method comprising:

(a)   in a first aliquot, contacting a candidate agent with the ADPI, the ADPI

10   fragment, the ADPI-related polypeptide, or the ADPI fusion protein, and

(b)   comparing the activity of the ADPI, the ADPI fragment, the ADPI-

related polypeptide, or the ADPI fusion protein in the first aliquot after addition of the

candidate agent with the activity of the ADPI, the ADPI fragment, the ADPI-related

polypeptide, or the ADPI fusion protein in a control aliquot, or with a previously

15   determined reference range.

40.   The method as claimed in claim 38 or claim 39, wherein the ADPI, the ADPI

fragment, the ADPI-related polypeptide, or the ADPI fusion protein is a recombinant

protein.

20

41.   The method as claimed in claim 38, 39 or 40, wherein the ADPI, the ADPI

fragment, the ADPI-related polypeptide, or the ADPI fusion protein is immobilized on

a solid phase.

25   42.   A method for screening, diagnosis or prognosis of Alzheimer's disease in a

subject or for monitoring the effect of an anti-Alzheimer's disease drug or therapy

administered to a subject, comprising:

(a)   contacting at least one oligonucleotide probe comprising 10 or more

consecutive nucleotides complementary to a nucleotide sequence encoding a ADPI

chosen from ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24, ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56,

5   ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-

10   119, ADPI-120, ADPI-121, ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1, ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3,

15   ADPI-154, ADPI-155, ADPI-156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183, ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208,

20   ADPI-209, ADPI-216, ADPI-217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253, ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262,

25   ADPI-263, ADPI-264, ADPI-265, ADPI-266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271, ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283, ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294,

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ADPI-295, ADPI-296, ADPI-297, ADPI-298, ADPI-299, ADPI-300, ADPI-301,

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ADPI-308, ADPI-309, ADPI-311, ADPI-312, ADPI-313, ADPI-314, ADPI-315,

ADPI-316.1, ADPI-316.2, ADPI-317, ADPI-318, ADPI-319, ADPI-320.1, ADPI-

5   320.2, ADPI-321, ADPI-322, ADPI-323, ADPI-324, ADPI-325, ADPI-326, ADPI-

327, ADPI-328, ADPI-329, ADPI-330, ADPI-331, ADPI-332, ADPI-333.1, ADPI-

333.2, ADPI-334, ADPI-335, ADPI-336, ADPI-337, ADPI-338, ADPI-339, ADPI-

340, ADPI-341, ADPI-342, ADPI-343, ADPI-344, ADPI-345, ADPI-346, ADPI-347,

ADPI-348, ADPI-349, ADPI-350, ADPI-351, ADPI-352, ADPI-353, ADPI-354,

10   ADPI-355, ADPI-356, ADPI-357, ADPI-358, ADPI-359, ADPI-360, ADPI-361,

ADPI-362, ADPI-363, ADPI-364, ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1,

ADPI-367.2, ADPI-368.1, ADPI-368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-

371, ADPI-372, ADPI-373, ADPI-374, ADPI-375, ADPI-376, ADPI-377, ADPI-378,

ADPI-379, ADPI-380, ADPI-381, ADPI-382, ADPI-383, ADPI-384, ADPI-386,

15   ADPI-387, ADPI-388, ADPI-389, ADPI-390, ADPI-391, ADPI-392, ADPI-393,

ADPI-394, ADPI-395, ADPI-396, ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2,

ADPI-400, ADPI-401, ADPI-402, ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405,

ADPI-406, ADPI-407, ADPI-408, ADPI-409, ADPI-410, ADPI-411, ADPI-412.1,

ADPI-412.2, ADPI-413, ADPI-414, ADPI-415, ADPI-416, ADPI-417, ADPI-418,

20   ADPI-419, ADPI-420, ADPI-421, ADPI-422, ADPI-423, ADPI-424, ADPI-425,

ADPI-426.1, ADPI-426.2, ADPI-427, ADPI-428, ADPI-429, ADPI-430, ADPI-431,

ADPI-432, ADPI-433, ADPI-434, ADPI-435, ADPI-435, ADPI-436, ADPI-437,

ADPI-438, ADPI-439, ADPI-440.1, ADPI-440.2, ADPI-441, ADPI-442, ADPI-443,

ADPI-444, ADPI-445, ADPI-446, ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449,

25   ADPI-450.1, ADPI-450.2, ADPI-451, ADPI-452, ADPI-453, ADPI-454, ADPI-455,

ADPI-456, ADPI-457, ADPI-458, ADPI-459, ADPI-460, ADPI-461, ADPI-462,

ADPI-463, ADPI-464, ADPI-465, ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468,

ADPI-469.1, ADPI-469.2, ADPI-470, ADPI-471, ADPI-472, ADPI-473, ADPI-474,

ADPI-475, ADPI-476, ADPI-477, ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480,

ADPI-481, ADPI-482, ADPI-483, ADPI-484, ADPI-485, ADPI-486, ADPI-487,

ADPI-488, ADPI-489, ADPI-490, ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2,

ADPI-494, ADPI-495, ADPI-496, ADPI-497, ADPI-498, ADPI-499, ADPI-500,

ADPI-501, ADPI-502, ADPI-503, ADPI-504, ADPI-505, ADPI-506, ADPI-507,

5   ADPI-508, ADPI-509, ADPI-510, ADPI-511, ADPI-512, ADPI-513, ADPI-514,

ADPI-515, ADPI-516, ADPI-517, ADPI-518, ADPI-519, ADPI-520, ADPI-521,

ADPI-522, ADPI-523, ADPI-524, ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527,

ADPI-528, ADPI-529, ADPI-530.1, ADPI-530.2, ADPI-531, ADPI-532, ADPI-533,

ADPI-534, ADPI-535, ADPI-536, ADPI-537, ADPI-538, ADPI-539, ADPI-540,

10   ADPI-541, ADPI-542, ADPI-543, ADPI-544, ADPI-545, ADPI-546, ADPI-547.1,

ADPI-547.2, ADPI-547.3, ADPI-548.1, ADPI-548.2, ADPI-549 with an RNA

obtained from a biological sample from the subject or with cDNA copied from the

RNA wherein said contacting occurs under conditions that permit hybridization of the

probe to the nucleotide sequence if present;

15   (b)   detecting hybridization, if any, between the probe and the nucleotide

sequence; and

(c)   comparing the hybridization, if any, detected in step (b) with the

hybridization detected in a control sample, or with a previously determined reference

range.

20

43.   The method as claimed in claim 42, wherein step (a) comprises contacting a

plurality of oligonucleotide probes comprising 10 or more consecutive nucleotides

complementary to a nucleotide sequence encoding a ADPI chosen from ADPI-1,

ADPI-3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10,

25   ADPI-11, ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23,

ADPI-24, ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-

33.1, ADPI-35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-

62, ADPI-66, ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-

78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90,

ADPI-91.1, ADPI-91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127,

5   ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1, ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2,

10   ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183, ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-216, ADPI-217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1,

15   ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253, ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-264, ADPI-265, ADPI-266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269,

20   ADPI-270, ADPI-271, ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283, ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296, ADPI-297, ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302,

25   ADPI-303, ADPI-304, ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311, ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2, ADPI-317, ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323, ADPI-324, ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329, ADPI-330, ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334,

ADPI-335, ADPI-336, ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341,

ADPI-342, ADPI-343, ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348,

ADPI-349, ADPI-350, ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355,

ADPI-356, ADPI-357, ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362,

5   ADPI-363, ADPI-364, ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-

367.2, ADPI-368.1, ADPI-368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-371,

ADPI-372, ADPI-373, ADPI-374, ADPI-375, ADPI-376, ADPI-377, ADPI-378,

ADPI-379, ADPI-380, ADPI-381, ADPI-382, ADPI-383, ADPI-384, ADPI-386,

ADPI-387, ADPI-388, ADPI-389, ADPI-390, ADPI-391, ADPI-392, ADPI-393,

10   ADPI-394, ADPI-395, ADPI-396, ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2,

ADPI-400, ADPI-401, ADPI-402, ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405,

ADPI-406, ADPI-407, ADPI-408, ADPI-409, ADPI-410, ADPI-411, ADPI-412.1,

ADPI-412.2, ADPI-413, ADPI-414, ADPI-415, ADPI-416, ADPI-417, ADPI-418,

ADPI-419, ADPI-420, ADPI-421, ADPI-422, ADPI-423, ADPI-424, ADPI-425,

15   ADPI-426.1, ADPI-426.2, ADPI-427, ADPI-428, ADPI-429, ADPI-430, ADPI-431,

ADPI-432, ADPI-433, ADPI-434, ADPI-435, ADPI-435, ADPI-436, ADPI-437,

ADPI-438, ADPI-439, ADPI-440.1, ADPI-440.2, ADPI-441, ADPI-442, ADPI-443,

ADPI-444, ADPI-445, ADPI-446, ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449,

ADPI-450.1, ADPI-450.2, ADPI-451, ADPI-452, ADPI-453, ADPI-454, ADPI-455,

20   ADPI-456, ADPI-457, ADPI-458, ADPI-459, ADPI-460, ADPI-461, ADPI-462,

ADPI-463, ADPI-464, ADPI-465, ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468,

ADPI-469.1, ADPI-469.2, ADPI-470, ADPI-471, ADPI-472, ADPI-473, ADPI-474,

ADPI-475, ADPI-476, ADPI-477, ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480,

ADPI-481, ADPI-482, ADPI-483, ADPI-484, ADPI-485, ADPI-486, ADPI-487,

25   ADPI-488, ADPI-489, ADPI-490, ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2,

ADPI-494, ADPI-495, ADPI-496, ADPI-497, ADPI-498, ADPI-499, ADPI-500,

ADPI-501, ADPI-502, ADPI-503, ADPI-504, ADPI-505, ADPI-506, ADPI-507,

ADPI-508, ADPI-509, ADPI-510, ADPI-511, ADPI-512, ADPI-513, ADPI-514,

ADPI-515, ADPI-516, ADPI-517, ADPI-518, ADPI-519, ADPI-520, ADPI-521,

ADPI-522, ADPI-523, ADPI-524, ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528, ADPI-529, ADPI-530.1, ADPI-530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534, ADPI-535, ADPI-536, ADPI-537, ADPI-538, ADPI-539, ADPI-540, ADPI-541, ADPI-542, ADPI-543, ADPI-544, ADPI-545, ADPI-546, ADPI-547.1,

5   ADPI-547.2, ADPI-547.3, ADPI-548.1, ADPI-548.2, ADPI-549 with an RNA obtained from a biological sample from the subject or with cDNA copied from the RNA wherein said contacting occurs under conditions that permit hybridization of the probe to the nucleotide sequence if present.

10   44.   The method as claimed in claim 43, wherein step (a) includes the step of hybridizing the nucleotide sequence to a DNA array, wherein one or more members of the array are the probes complementary to a plurality of nucleotide sequences encoding distinct ADPIs.

15   45.   A method of modulating the activity of one or more of the following Alzheimer's Disease-Associated Protein Isoforms (ADPIs): ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24, ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37,

20   ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-

25   112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1,

ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183, ADPI-188.1,

5   ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-216, ADPI-217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253,

10   ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-264, ADPI-265, ADPI-266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271, ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283,

15   ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296, ADPI-297, ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302, ADPI-303, ADPI-304, ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311, ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2, ADPI-317,

20   ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323, ADPI-324, ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329, ADPI-330, ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334, ADPI-335, ADPI-336, ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341, ADPI-342, ADPI-343, ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348, ADPI-349, ADPI-350,

25   ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355, ADPI-356, ADPI-357, ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362, ADPI-363, ADPI-364, ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-367.2, ADPI-368.1, ADPI-368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-371, ADPI-372, ADPI-373, ADPI-374, ADPI-375, ADPI-376, ADPI-377, ADPI-378, ADPI-379, ADPI-380, ADPI-381,

ADPI-382, ADPI-383, ADPI-384, ADPI-386, ADPI-387, ADPI-388, ADPI-389,

ADPI-390, ADPI-391, ADPI-392, ADPI-393, ADPI-394, ADPI-395, ADPI-396,

ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2, ADPI-400, ADPI-401, ADPI-402,

ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405, ADPI-406, ADPI-407, ADPI-408,

5   ADPI-409, ADPI-410, ADPI-411, ADPI-412.1, ADPI-412.2, ADPI-413, ADPI-414,

ADPI-415, ADPI-416, ADPI-417, ADPI-418, ADPI-419, ADPI-420, ADPI-421,

ADPI-422, ADPI-423, ADPI-424, ADPI-425, ADPI-426.1, ADPI-426.2, ADPI-427,

ADPI-428, ADPI-429, ADPI-430, ADPI-431, ADPI-432, ADPI-433, ADPI-434,

ADPI-435, ADPI-435, ADPI-436, ADPI-437, ADPI-438, ADPI-439, ADPI-440.1,

10   ADPI-440.2, ADPI-441, ADPI-442, ADPI-443, ADPI-444, ADPI-445, ADPI-446,

ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449, ADPI-450.1, ADPI-450.2, ADPI-

451, ADPI-452, ADPI-453, ADPI-454, ADPI-455, ADPI-456, ADPI-457, ADPI-458,

ADPI-459, ADPI-460, ADPI-461, ADPI-462, ADPI-463, ADPI-464, ADPI-465,

ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468, ADPI-469.1, ADPI-469.2, ADPI-

15   470, ADPI-471, ADPI-472, ADPI-473, ADPI-474, ADPI-475, ADPI-476, ADPI-477,

ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480, ADPI-481, ADPI-482, ADPI-483,

ADPI-484, ADPI-485, ADPI-486, ADPI-487, ADPI-488, ADPI-489, ADPI-490,

ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2, ADPI-494, ADPI-495, ADPI-496,

ADPI-497, ADPI-498, ADPI-499, ADPI-500, ADPI-501, ADPI-502, ADPI-503,

20   ADPI-504, ADPI-505, ADPI-506, ADPI-507, ADPI-508, ADPI-509, ADPI-510,

ADPI-511, ADPI-512, ADPI-513, ADPI-514, ADPI-515, ADPI-516, ADPI-517,

ADPI-518, ADPI-519, ADPI-520, ADPI-521, ADPI-522, ADPI-523, ADPI-524,

ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528, ADPI-529, ADPI-530.1,

ADPI-530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534, ADPI-535, ADPI-536,

25   ADPI-537, ADPI-538, ADPI-539, ADPI-540, ADPI-541, ADPI-542, ADPI-543,

ADPI-544, ADPI-545, ADPI-546, ADPI-547.1, ADPI-547.2, ADPI-547.3, ADPI-

548.1, ADPI-548.2, ADPI-549, comprising the step of contacting a cell with an agent

which specifically binds to one or more of the following Alzheimer's

Disease-Associated Protein Isoforms (ADPIs): ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-

270

3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1, ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24, ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68,

5   ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2, ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-

10   125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1, ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-156.2, ADPI-

15   156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183, ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-216, ADPI-217, ADPI-

20   220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253, ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-264, ADPI-265, ADPI-

25   266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271, ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283, ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296, ADPI-297, ADPI-298,

ADPI-299, ADPI-300, ADPI-301, ADPI-302, ADPI-303, ADPI-304, ADPI-305,

ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311, ADPI-312,

ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2, ADPI-317, ADPI-318,

ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323, ADPI-324,

5 ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329, ADPI-330, ADPI-331,

ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334, ADPI-335, ADPI-336, ADPI-337,

ADPI-338, ADPI-339, ADPI-340, ADPI-341, ADPI-342, ADPI-343, ADPI-344,

ADPI-345, ADPI-346, ADPI-347, ADPI-348, ADPI-349, ADPI-350, ADPI-351,

ADPI-352, ADPI-353, ADPI-354, ADPI-355, ADPI-356, ADPI-357, ADPI-358,

10 ADPI-359, ADPI-360, ADPI-361, ADPI-362, ADPI-363, ADPI-364, ADPI-365.1,

ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-367.2, ADPI-368.1, ADPI-368.2, ADPI-

369.1, ADPI-369.2, ADPI-370, ADPI-371, ADPI-372, ADPI-373, ADPI-374, ADPI-

375, ADPI-376, ADPI-377, ADPI-378, ADPI-379, ADPI-380, ADPI-381, ADPI-382,

ADPI-383, ADPI-384, ADPI-386, ADPI-387, ADPI-388, ADPI-389, ADPI-390,

15 ADPI-391, ADPI-392, ADPI-393, ADPI-394, ADPI-395, ADPI-396, ADPI-397,

ADPI-398, ADPI-399.1, ADPI-399.2, ADPI-400, ADPI-401, ADPI-402, ADPI-403,

ADPI-404.1, ADPI-404.2, ADPI-405, ADPI-406, ADPI-407, ADPI-408, ADPI-409,

ADPI-410, ADPI-411, ADPI-412.1, ADPI-412.2, ADPI-413, ADPI-414, ADPI-415,

ADPI-416, ADPI-417, ADPI-418, ADPI-419, ADPI-420, ADPI-421, ADPI-422,

20 ADPI-423, ADPI-424, ADPI-425, ADPI-426.1, ADPI-426.2, ADPI-427, ADPI-428,

ADPI-429, ADPI-430, ADPI-431, ADPI-432, ADPI-433, ADPI-434, ADPI-435,

ADPI-435, ADPI-436, ADPI-437, ADPI-438, ADPI-439, ADPI-440.1, ADPI-440.2,

ADPI-441, ADPI-442, ADPI-443, ADPI-444, ADPI-445, ADPI-446, ADPI-447.1,

ADPI-447.2, ADPI-448, ADPI-449, ADPI-450.1, ADPI-450.2, ADPI-451, ADPI-452,

25 ADPI-453, ADPI-454, ADPI-455, ADPI-456, ADPI-457, ADPI-458, ADPI-459,

ADPI-460, ADPI-461, ADPI-462, ADPI-463, ADPI-464, ADPI-465, ADPI-466.1,

ADPI-466.2, ADPI-467, ADPI-468, ADPI-469.1, ADPI-469.2, ADPI-470, ADPI-471,

ADPI-472, ADPI-473, ADPI-474, ADPI-475, ADPI-476, ADPI-477, ADPI-478.1,

ADPI-478.2, ADPI-479, ADPI-480, ADPI-481, ADPI-482, ADPI-483, ADPI-484,

ADPI-485, ADPI-486, ADPI-487, ADPI-488, ADPI-489, ADPI-490, ADPI-491,

ADPI-492, ADPI-493.1, ADPI-493.2, ADPI-494, ADPI-495, ADPI-496, ADPI-497,

ADPI-498, ADPI-499, ADPI-500, ADPI-501, ADPI-502, ADPI-503, ADPI-504,

ADPI-505, ADPI-506, ADPI-507, ADPI-508, ADPI-509, ADPI-510, ADPI-511,

5   ADPI-512, ADPI-513, ADPI-514, ADPI-515, ADPI-516, ADPI-517, ADPI-518,

ADPI-519, ADPI-520, ADPI-521, ADPI-522, ADPI-523, ADPI-524, ADPI-525,

ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528, ADPI-529, ADPI-530.1, ADPI-

530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534, ADPI-535, ADPI-536, ADPI-

537, ADPI-538, ADPI-539, ADPI-540, ADPI-541, ADPI-542, ADPI-543, ADPI-544,

10   ADPI-545, ADPI-546, ADPI-547.1, ADPI-547.2, ADPI-547.3, ADPI-548.1, ADPI-

548.2, ADPI-549, whereby the activity of the respective ADPI is modulated.

46.   An agent that modulates the activity of one or more of the following

Alzheimer's Disease-Associated Protein Isoforms (ADPIs): ADPI-1, ADPI-3.1, ADPI-

15   3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1,

ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24, ADPI-25.3,

ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37,

ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67,

ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-

20   81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2,

ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-

103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-

112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-

124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129,

25   ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140,

ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-144, ADPI-

146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1,

ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-

156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2,

ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183, ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-216, ADPI-

5   217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240, ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253, ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1, ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-264, ADPI-265,

10 ADPI-266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271, ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1, ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283, ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290, ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296, ADPI-297, `

15 ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302, ADPI-303, ADPI-304, ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311, ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2, ADPI-317, ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323, ADPI-324, ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329, ADPI-330,

20 ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334, ADPI-335, ADPI-336, ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341, ADPI-342, ADPI-343, ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348, ADPI-349, ADPI-350, ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355, ADPI-356, ADPI-357, ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362, ADPI-363, ADPI-364,

25 ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-367.2, ADPI-368.1, ADPI-368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-371, ADPI-372, ADPI-373, ADPI-374, ADPI-375, ADPI-376, ADPI-377, ADPI-378, ADPI-379, ADPI-380, ADPI-381, ADPI-382, ADPI-383, ADPI-384, ADPI-386, ADPI-387, ADPI-388, ADPI-389, ADPI-390, ADPI-391, ADPI-392, ADPI-393, ADPI-394, ADPI-395, ADPI-396,

ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2, ADPI-400, ADPI-401, ADPI-402,

ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405, ADPI-406, ADPI-407, ADPI-408,

ADPI-409, ADPI-410, ADPI-411, ADPI-412.1, ADPI-412.2, ADPI-413, ADPI-414,

ADPI-415, ADPI-416, ADPI-417, ADPI-418, ADPI-419, ADPI-420, ADPI-421,

5 ADPI-422, ADPI-423, ADPI-424, ADPI-425, ADPI-426.1, ADPI-426.2, ADPI-427,

ADPI-428, ADPI-429, ADPI-430, ADPI-431, ADPI-432, ADPI-433, ADPI-434,

ADPI-435, ADPI-435, ADPI-436, ADPI-437, ADPI-438, ADPI-439, ADPI-440.1,

ADPI-440.2, ADPI-441, ADPI-442, ADPI-443, ADPI-444, ADPI-445, ADPI-446,

ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449, ADPI-450.1, ADPI-450.2, ADPI-

10 451, ADPI-452, ADPI-453, ADPI-454, ADPI-455, ADPI-456, ADPI-457, ADPI-458,

ADPI-459, ADPI-460, ADPI-461, ADPI-462, ADPI-463, ADPI-464, ADPI-465,

ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468, ADPI-469.1, ADPI-469.2, ADPI-

470, ADPI-471, ADPI-472, ADPI-473, ADPI-474, ADPI-475, ADPI-476, ADPI-477,

ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480, ADPI-481, ADPI-482, ADPI-483,

15 ADPI-484, ADPI-485, ADPI-486, ADPI-487, ADPI-488, ADPI-489, ADPI-490,

ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2, ADPI-494, ADPI-495, ADPI-496,

ADPI-497, ADPI-498, ADPI-499, ADPI-500, ADPI-501, ADPI-502, ADPI-503,

ADPI-504, ADPI-505, ADPI-506, ADPI-507, ADPI-508, ADPI-509, ADPI-510,

ADPI-511, ADPI-512, ADPI-513, ADPI-514, ADPI-515, ADPI-516, ADPI-517,

20 ADPI-518, ADPI-519, ADPI-520, ADPI-521, ADPI-522, ADPI-523, ADPI-524,

ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528, ADPI-529, ADPI-530.1,

ADPI-530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534, ADPI-535, ADPI-536,

ADPI-537, ADPI-538, ADPI-539, ADPI-540, ADPI-541, ADPI-542, ADPI-543,

ADPI-544, ADPI-545, ADPI-546, ADPI-547.1, ADPI-547.2, ADPI-547.3, ADPI-

25 548.1, ADPI-548.2, ADPI-549, wherein said agent is identified by the method of any

of claims 27-41.

47.   A pharmaceutical composition, comprising the agent of claim 46 and a

pharmaceutically acceptable carrier.

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48.   The use of an agent of claim 46 in the manufacture of a medicament for the treatment of Alzheimer's disease.

5   49.   A method of treating or preventing Alzheimer's disease comprising administering to a subject in need of such treatment or prevention a therapeutically effective dose of an agent that modulates the activity of one or more of the following Alzheimer's Disease-Associated Protein Isoforms (ADPIs): ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1,

10   ADPI-12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24, ADPI-25.3, ADPI-25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37, ADPI-39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68, ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2,

15   ADPI-92, ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-103, ADPI-105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-112, ADPI-113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130, ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140,

20   ADPI-141, ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-144, ADPI-146.2, ADPI-146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1, ADPI-152, ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-156.2, ADPI-156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2, ADPI-162.3, ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-

25   173.2, ADPI-175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183, ADPI-188.1, ADPI-189.2, ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-196.1, ADPI-196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-216, ADPI-217, ADPI-220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-230.2, ADPI-232.1, ADPI-232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240,

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ADPI-243, ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253,

ADPI-254, ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1,

ADPI-259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-264, ADPI-265,

ADPI-266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271,

5   ADPI-272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1,

ADPI-278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283,

ADPI-284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290,

ADPI-291, ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296, ADPI-297,

ADPI-298, ADPI-299, ADPI-300, ADPI-301, ADPI-302, ADPI-303, ADPI-304,

10   ADPI-305, ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311,

ADPI-312, ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2, ADPI-317,

ADPI-318, ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323,

ADPI-324, ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329, ADPI-330,

ADPI-331, ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334, ADPI-335, ADPI-336,

15   ADPI-337, ADPI-338, ADPI-339, ADPI-340, ADPI-341, ADPI-342, ADPI-343,

ADPI-344, ADPI-345, ADPI-346, ADPI-347, ADPI-348, ADPI-349, ADPI-350,

ADPI-351, ADPI-352, ADPI-353, ADPI-354, ADPI-355, ADPI-356, ADPI-357,

ADPI-358, ADPI-359, ADPI-360, ADPI-361, ADPI-362, ADPI-363, ADPI-364,

ADPI-365.1, ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-367.2, ADPI-368.1, ADPI-

20   368.2, ADPI-369.1, ADPI-369.2, ADPI-370, ADPI-371, ADPI-372, ADPI-373, ADPI-

374, ADPI-375, ADPI-376, ADPI-377, ADPI-378, ADPI-379, ADPI-380, ADPI-381,

ADPI-382, ADPI-383, ADPI-384, ADPI-386, ADPI-387, ADPI-388, ADPI-389,

ADPI-390, ADPI-391, ADPI-392, ADPI-393, ADPI-394, ADPI-395, ADPI-396,

ADPI-397, ADPI-398, ADPI-399.1, ADPI-399.2, ADPI-400, ADPI-401, ADPI-402,

25   ADPI-403, ADPI-404.1, ADPI-404.2, ADPI-405, ADPI-406, ADPI-407, ADPI-408,

ADPI-409, ADPI-410, ADPI-411, ADPI-412.1, ADPI-412.2, ADPI-413, ADPI-414,

ADPI-415, ADPI-416, ADPI-417, ADPI-418, ADPI-419, ADPI-420, ADPI-421,

ADPI-422, ADPI-423, ADPI-424, ADPI-425, ADPI-426.1, ADPI-426.2, ADPI-427,

ADPI-428, ADPI-429, ADPI-430, ADPI-431, ADPI-432, ADPI-433, ADPI-434,

ADPI-435, ADPI-435, ADPI-436, ADPI-437, ADPI-438, ADPI-439, ADPI-440.1,

ADPI-440.2, ADPI-441, ADPI-442, ADPI-443, ADPI-444, ADPI-445, ADPI-446,

ADPI-447.1, ADPI-447.2, ADPI-448, ADPI-449, ADPI-450.1, ADPI-450.2, ADPI-

451, ADPI-452, ADPI-453, ADPI-454, ADPI-455, ADPI-456, ADPI-457, ADPI-458,

5   ADPI-459, ADPI-460, ADPI-461, ADPI-462, ADPI-463, ADPI-464, ADPI-465,

ADPI-466.1, ADPI-466.2, ADPI-467, ADPI-468, ADPI-469.1, ADPI-469.2, ADPI-

470, ADPI-471, ADPI-472, ADPI-473, ADPI-474, ADPI-475, ADPI-476, ADPI-477,

ADPI-478.1, ADPI-478.2, ADPI-479, ADPI-480, ADPI-481, ADPI-482, ADPI-483,

ADPI-484, ADPI-485, ADPI-486, ADPI-487, ADPI-488, ADPI-489, ADPI-490,

10   ADPI-491, ADPI-492, ADPI-493.1, ADPI-493.2, ADPI-494, ADPI-495, ADPI-496,

ADPI-497, ADPI-498, ADPI-499, ADPI-500, ADPI-501, ADPI-502, ADPI-503,

ADPI-504, ADPI-505, ADPI-506, ADPI-507, ADPI-508, ADPI-509, ADPI-510,

ADPI-511, ADPI-512, ADPI-513, ADPI-514, ADPI-515, ADPI-516, ADPI-517,

ADPI-518, ADPI-519, ADPI-520, ADPI-521, ADPI-522, ADPI-523, ADPI-524,

15   ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528, ADPI-529, ADPI-530.1,

ADPI-530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534, ADPI-535, ADPI-536,

ADPI-537, ADPI-538, ADPI-539, ADPI-540, ADPI-541, ADPI-542, ADPI-543,

ADPI-544, ADPI-545, ADPI-546, ADPI-547.1, ADPI-547.2, ADPI-547.3, ADPI-

548.1, ADPI-548.2, ADPI-549, whereby the symptoms of Alzheimer's disease are

20   ameliorated.

50.   A method for identifying targets for therapeutic modulation of Alzheimer's

disease wherein the activity of one or more of the following Alzheimer's

Disease-Associated Protein Isoforms (ADPIs): ADPI-1, ADPI-3.1, ADPI-3.2, ADPI-

25   3.3, ADPI-5.3, ADPI-6, ADPI-8, ADPI-9, ADPI-10, ADPI-11, ADPI-12.1, ADPI-

12.2, ADPI-13, ADPI-15, ADPI-16, ADPI-22, ADPI-23, ADPI-24, ADPI-25.3, ADPI-

25.2, ADPI-26, ADPI-27, ADPI-29, ADPI-31, ADPI-33.1, ADPI-35, ADPI-37, ADPI-

39, ADPI-42, ADPI-54, ADPI-56, ADPI-61, ADPI-62, ADPI-66, ADPI-67, ADPI-68,

ADPI-70, ADPI-72, ADPI-77, ADPI-78.2, ADPI-78.3, ADPI-79, ADPI-81.2, ADPI-

278

82, ADPI-85, ADPI-87.1, ADPI-88, ADPI-90, ADPI-91.1, ADPI-91.2, ADPI-92,

ADPI-94, ADPI-95, ADPI-97, ADPI-98, ADPI-101, ADPI-102.1, ADPI-103, ADPI-

105.2, ADPI-105.1, ADPI-107, ADPI-108, ADPI-109, ADPI-111.1, ADPI-112, ADPI-

113, ADPI-115, ADPI-117.1, ADPI-119, ADPI-120, ADPI-121, ADPI-124, ADPI-

5   125, ADPI-126, ADPI-126, ADPI-126, ADPI-127, ADPI-128, ADPI-129, ADPI-130,

ADPI-131, ADPI-132, ADPI-133, ADPI-138, ADPI-139, ADPI-140, ADPI-141,

ADPI-142.2, ADPI-142.1, ADPI-143.1, ADPI-143.2, ADPI-144, ADPI-146.2, ADPI-

146.1, ADPI-148, ADPI-149.1, ADPI-150, ADPI-151.2, ADPI-151.1, ADPI-152,

ADPI-153.1, ADPI-153.2, ADPI-153.3, ADPI-154, ADPI-155, ADPI-156.2, ADPI-

10   156.1, ADPI-157, ADPI-159.1, ADPI-159.2, ADPI-160, ADPI-162.2, ADPI-162.3,

ADPI-162.1, ADPI-163, ADPI-165, ADPI-172, ADPI-173.1, ADPI-173.2, ADPI-

175.2, ADPI-175.1, ADPI-176, ADPI-182, ADPI-183, ADPI-188.1, ADPI-189.2,

ADPI-191, ADPI-193, ADPI-194.2, ADPI-196.2, ADPI-196.3, ADPI-196.1, ADPI-

196.4, ADPI-202, ADPI-204, ADPI-208, ADPI-209, ADPI-216, ADPI-217, ADPI-

15   220, ADPI-223, ADPI-228, ADPI-229, ADPI-230.1, ADPI-230.2, ADPI-232.1, ADPI-

232.2, ADPI-236.2, ADPI-236.3, ADPI-237.2, ADPI-237.1, ADPI-240, ADPI-243,

ADPI-245, ADPI-250, ADPI-251, ADPI-252.1, ADPI-252.2, ADPI-253, ADPI-254,

ADPI-255, ADPI-256, ADPI-257.1, ADPI-257.2, ADPI-258, ADPI-259.1, ADPI-

259.2, ADPI-260, ADPI-261, ADPI-262, ADPI-263, ADPI-264, ADPI-265, ADPI-

20   266, ADPI-267, ADPI-268.1, ADPI-268.2, ADPI-269, ADPI-270, ADPI-271, ADPI-

272, ADPI-273, ADPI-274, ADPI-275, ADPI-276, ADPI-277, ADPI-278.1, ADPI-

278.2, ADPI-279.1, ADPI-279.2, ADPI-280, ADPI-281, ADPI-282, ADPI-283, ADPI-

284, ADPI-285, ADPI-286, ADPI-287, ADPI-288, ADPI-289, ADPI-290, ADPI-291,

ADPI-292, ADPI-293, ADPI-294, ADPI-295, ADPI-296, ADPI-297, ADPI-298,

25   ADPI-299, ADPI-300, ADPI-301, ADPI-302, ADPI-303, ADPI-304, ADPI-305,

ADPI-306, ADPI-307.1, ADPI-307.2, ADPI-308, ADPI-309, ADPI-311, ADPI-312,

ADPI-313, ADPI-314, ADPI-315, ADPI-316.1, ADPI-316.2, ADPI-317, ADPI-318,

ADPI-319, ADPI-320.1, ADPI-320.2, ADPI-321, ADPI-322, ADPI-323, ADPI-324,

ADPI-325, ADPI-326, ADPI-327, ADPI-328, ADPI-329, ADPI-330, ADPI-331,

ADPI-332, ADPI-333.1, ADPI-333.2, ADPI-334, ADPI-335, ADPI-336, ADPI-337,

ADPI-338, ADPI-339, ADPI-340, ADPI-341, ADPI-342, ADPI-343, ADPI-344,

ADPI-345, ADPI-346, ADPI-347, ADPI-348, ADPI-349, ADPI-350, ADPI-351,

ADPI-352, ADPI-353, ADPI-354, ADPI-355, ADPI-356, ADPI-357, ADPI-358,

5   ADPI-359, ADPI-360, ADPI-361, ADPI-362, ADPI-363, ADPI-364, ADPI-365.1,

ADPI-365.2, ADPI-366, ADPI-367.1, ADPI-367.2, ADPI-368.1, ADPI-368.2, ADPI-

369.1, ADPI-369.2, ADPI-370, ADPI-371, ADPI-372, ADPI-373, ADPI-374, ADPI-

375, ADPI-376, ADPI-377, ADPI-378, ADPI-379, ADPI-380, ADPI-381, ADPI-382,

ADPI-383, ADPI-384, ADPI-386, ADPI-387, ADPI-388, ADPI-389, ADPI-390,

10   ADPI-391, ADPI-392, ADPI-393, ADPI-394, ADPI-395, ADPI-396, ADPI-397,

ADPI-398, ADPI-399.1, ADPI-399.2, ADPI-400, ADPI-401, ADPI-402, ADPI-403,

ADPI-404.1, ADPI-404.2, ADPI-405, ADPI-406, ADPI-407, ADPI-408, ADPI-409,

ADPI-410, ADPI-411, ADPI-412.1, ADPI-412.2, ADPI-413, ADPI-414, ADPI-415,

ADPI-416, ADPI-417, ADPI-418, ADPI-419, ADPI-420, ADPI-421, ADPI-422,

15   ADPI-423, ADPI-424, ADPI-425, ADPI-426.1, ADPI-426.2, ADPI-427, ADPI-428,

ADPI-429, ADPI-430, ADPI-431, ADPI-432, ADPI-433, ADPI-434, ADPI-435,

ADPI-435, ADPI-436, ADPI-437, ADPI-438, ADPI-439, ADPI-440.1, ADPI-440.2,

ADPI-441, ADPI-442, ADPI-443, ADPI-444, ADPI-445, ADPI-446, ADPI-447.1,

ADPI-447.2, ADPI-448, ADPI-449, ADPI-450.1, ADPI-450.2, ADPI-451, ADPI-452,

20   ADPI-453, ADPI-454, ADPI-455, ADPI-456, ADPI-457, ADPI-458, ADPI-459,

ADPI-460, ADPI-461, ADPI-462, ADPI-463, ADPI-464, ADPI-465, ADPI-466.1,

ADPI-466.2, ADPI-467, ADPI-468, ADPI-469.1, ADPI-469.2, ADPI-470, ADPI-471,

ADPI-472, ADPI-473, ADPI-474, ADPI-475, ADPI-476, ADPI-477, ADPI-478.1,

ADPI-478.2, ADPI-479, ADPI-480, ADPI-481, ADPI-482, ADPI-483, ADPI-484,

25   ADPI-485, ADPI-486, ADPI-487, ADPI-488, ADPI-489, ADPI-490, ADPI-491,

ADPI-492, ADPI-493.1, ADPI-493.2, ADPI-494, ADPI-495, ADPI-496, ADPI-497,

ADPI-498, ADPI-499, ADPI-500, ADPI-501, ADPI-502, ADPI-503, ADPI-504,

ADPI-505, ADPI-506, ADPI-507, ADPI-508, ADPI-509, ADPI-510, ADPI-511,

ADPI-512, ADPI-513, ADPI-514, ADPI-515, ADPI-516, ADPI-517, ADPI-518,

ADPI-519, ADPI-520, ADPI-521, ADPI-522, ADPI-523, ADPI-524, ADPI-525, ADPI-526.1, ADPI-526.2, ADPI-527, ADPI-528, ADPI-529, ADPI-530.1, ADPI-530.2, ADPI-531, ADPI-532, ADPI-533, ADPI-534, ADPI-535, ADPI-536, ADPI-537, ADPI-538, ADPI-539, ADPI-540, ADPI-541, ADPI-542, ADPI-543, ADPI-544,

5   ADPI-545, ADPI-546, ADPI-547.1, ADPI-547.2, ADPI-547.3, ADPI-548.1, ADPI-548.2, ADPI-549 is utilized as a measure to determine whether a candidate target is effective for modulation of Alzheimer's disease.

51.   A method of screening for agents effective for the treatment of Alzheimer's

10   disease comprising:

(a)   contacting ERK-2 with a first population of cells expressing a receptor for ERK-2 in the presence of a candidate agent;

(b)   contacting ERK-2 with a second population of cells expressing said receptor in the presence of a control agent;

15   (c)   comparing the binding of said ERK-2 to the first and second populations of cells, or comparing the level of induction of a cellular second messenger in the first and second populations of cells, or comparing the level of an ERK-2 mediated activity in the first and second population of cells; and

(d)   testing for the ability of agents able to modulate the activity of ERK-2

20   to decrease clinical features of Alzheimer's disease in a Alzheimer's disease model system.

52.   The method as claimed in claim 51, wherein the ERK-2 and/or the receptor are isolated and recombinantly produced.

25

53.   The method as claimed in claim 51 or claim 52, wherein the cells are cerebellar granule cells and the ERK-2 mediated activity is protection of immature cerebellar cells from apoptotic death.

54.   The method as claimed in claim 53, wherein the cells are retinoblastoma or cerebellar granule cells and the binding of ERK-2 to the cells is compared.

55.   The method as claimed in any one of claims 51 to 54, wherein the candidate
agent comprises at least 10 consecutive amino acids of ERK-2.

56.   A method of screening for agents that modulate the binding of ERK-2 to a binding partner comprising:

(a)   contacting ERK-2 with the ERK-2 binding partner in the presence of a candidate agent;

(b)   contacting ERK-2 with a ERK-2 binding partner in the presence of a control agent; and

(c)   comparing the binding of said ERK-2 to the binding partner in step (a) to the binding of said ERK-2 to the binding partner in step (b).

57.   The method of claim 56, wherein the binding partner is an isolated 41 kDa ERK-2 receptor.